



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor : Peter Crane et al.	Group Art Unit: 2652 Examiner: T. Chen
Appln. No. : 09/808,843	
Filed : March 15, 2001	
Title : MICRO-ACTUATOR STRUCTURE FOR IMPROVED STABILITY	
Docket No. : I69.12-0487	

EXPRESS MAIL COVER SHEET

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SENT VIA EXPRESS MAIL

Express Mail No.: EV 215783830 US

Sir:

The following papers are being transmitted via **EXPRESS MAIL** to the U.S. Patent and Trademark Office on the date shown below:

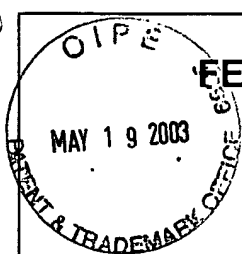
- 1. Postcard
- 2. Fee Transmittal (In Duplicate)
- 3. Amendment

Respectfully submitted,

KINNEY & LANGE, P.A.

Date: 5/19/03

By Gayle A. Bush
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FEE TRANSMITTAL

Continue if Known

Application No. 09/808,843
Filing Date March 15, 2003
First Named Inventor Peter Crane et al.
Group Art Unit 2652
Examiner Name T. Chen

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MAY 22 2003

Total Amount of Payment \$-0-

Atty. Docket Number 169.12-0487

Technology Center 2600

METHOD OF PAYMENT (Check One)

1. ☒ The Commissioner is hereby authorized to charge any additional fee required under 37 C.F.R. 1.16 and 1.17 and credit any over payments to Deposit Account No. 11-0982.
Deposit Account Name: Kinney & Lange, P.A.

2. ☐ Check Enclosed

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
101	710	201	355	[] Utility Filing Fee
106	320	206	160	[] Design Filing Fee
108	710	208	355	[] Reissue Filing Fee
114	150	214	75	[] Prov. Filing Fee

Subtotal (1) \$-0-

2. EXTRA CLAIM FEES

	Number Claims	Prior	Extra	Fee from Below	Fee Paid
Total	20	-	20	= 0 x 0 = 0	
Indep.	3	-	3	= 0 x 0 = 0	
Multiple Dependent Claims				=	

Insert 3 and 20, or number previously paid if greater; Reissue see below

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple Dependent Claim
109	80	209	40	Reissue Independent Claims Over Original Patent
110	18	210	9	Reissue claims in excess of 20 and over original patent

Subtotal (2) \$-0-

FEE CALCULATION (Continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee paid
105	130	205	65	Surcharge - Late filing fee or oath	-
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	-
139	130	139	130	Non-English specification	-
147	2,520	147	2,520	For Filing a Request for Reexamination	-
115	110	215	55	Extension for reply within first month	-
116	390	216	195	Extension for reply within second month	-
117	890	217	445	Extension for reply within third month	-
118	1,390	218	695	Extension for reply within fourth month	-
128	1,890	280	945	Extension for reply within fifth month	-
120	310	220	155	Filing a brief in support of an appeal	-
121	270	221	135	Request for oral hearing	-
148	110	248	55	Terminal Disclaimer Fee	-
140	110	240	55	Petition to revive - unavoidable	-
141	1,240	241	620	Petition to revive - unintentional	-
142	1,270	242	650	Utility/Reissue issue fee (inc. advance copies)	-
143	440	243	220	Design issue fee (inc. advance copies)	-
122	130	122	130	Petitions to the Commissioner	-
123	50	123	50	Petitions related to provisional applications	-
126	180	126	180	Submission of Information Disclosure Statement	-
581	40	581	40	Recording each patent assignment per property (times number of properties)	-

Other fee (specify) _____

Subtotal (3) \$-0-

Signature

Gayle A. Bush
Gayle A. Bush

Reg. No.

52,677

Date

5/19/03

Deposit Account No.

11-0982



05-20-03

2659

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AMENDMENT

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Sir:

This is in response to the Office Action mailed on February 21, 2003. Please amend the above-identified application as follows:

IN THE CLAIMS

Please amend claims 7, 11 and 20 (marked up version attached in Appendix) and add new claims 21-23, such that pending claims 1-23 are as follows:

Sub B1
A1

1. A microactuator for finely positioning a transducing head carried by a slider adjacent a select radial track of a disc, the microactuator comprising:

a microactuator frame having a stator and having a rotor which holds the slider and is movable with respect to the stator; and
means for limiting deflection of the stator out of a plane defined by the microactuator frame.

2. The microactuator of claim 1 wherein the means for limiting deflection of the stator comprises a beam structure operatively connecting the rotor to the stator so as to permit movement of the rotor with respect to the stator, the beam structure including a first beam pair element defining a rotation center and a second beam pair element arranged to restrain the stator from twisting out of plane.